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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/028, 726 02/24/98 JOKIMIES

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EXAMINER

TM02/0705

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PERMAN & GREEN  
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FAIRFIELD CT 06430

APP LIAH. I.	ART UNIT	PAPER NUMBER
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2682  
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. 09/028,726	Applicant(s) Jokimies
	Examiner Charles Appiah	Art Unit 2682

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Apr 19, 2001

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 1035 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-9 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-9 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892) 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 19)  Notice of Informal Patent Application (PTO-152)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20)  Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 4 and 6 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alford (5,722,070)** in view of **Raith et al. (5,353,332)**.

With respect to claims 1, 4, and 6 Alford teaches a cellular system, which comprises terminals, cells and a network including stationary network equipment of which the terminals are arranged to set up and maintain radio communication with base stations in the cells (see FIG. 2). wherein at least one terminal is arranged to favor at least one cell based on data specific to that terminal (feature transmission of cell beacon that identifies a particular cell being transmitted on every transceiver in the cell site base station, col. 7, lines 41-54, the cell beacon comprises cell ID code . . . , col. 8, lines 17-41, and “the indicia of cell of preference is equal to the cell ID code transmitted in the cell beacon . . . ”, col. 9, lines 10-17). Alford, however, fail to specifically disclose that the cell of preference is based on data stored in and received from the network. In an

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analogous field of endeavor, Raith teaches a system for cell selection in which the network, through a base station stores and transmits on the control channel information on the characteristics of a cell of preference for a mobile station to determine which cell to lock on to (see col. 11, lines 4-31). It would therefore have been obvious to one of ordinary skill in the art to combine the above teaching of Raith with the system of Alford for the benefit of providing services which can be updated easily from centrally kept data.

4. Claims 1, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alford (5,722, 070)** in view of **previously cited reference, Leih et al. (WO 95/07010)**.

With respect to claims 1, 4, and 6 Alford teaches a cellular system, which comprises terminals, cells and a network including stationary network equipment of which the terminals are arranged to set up and maintain radio communication with base stations in the cells (see FIG. 2). wherein at least one terminal is arranged to favor at least one cell based on data specific to that terminal (feature transmission of cell beacon that identifies a particular cell being transmitted on every transceiver in the cell site base station, col. 7, lines 41-54, the cell beacon comprises cell ID code . . . , col. 8, lines 17-41, and “the indicia of cell of preference is equal to the cell ID code transmitted in the cell beacon . . . ”, col. 9, lines 10-17). Alford, however, fail to specifically disclose that the cell of preference is based on data stored in and received from the network. In an analogous field of endeavor, Leih discloses a system for available domain selection in which the network, stores and transmits on the preference lists for a mobile station to use in making a selection for a particular service such as the best communication domain (see page 4, line 2 to

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page 5, line 4). Leih suggests it is advantageous to hold the preference list in the (fixed) network system, e.g. in an exchange so mobile stations can be constructed more simply and less expensively and also keeping up to date the centrally kept preference list in a simple manner when modifications occur in the network (see page 4, line 26 to page 5, lin 4). Hence it would have been obvious to one of ordinary skill in the art to combine the above teaching of Raith with the system of Alford for the benefit of providing a centrally stored preference list(s) which can be updated easily from centrally kept data and in which the mobile stations can be constructed more simply and thus less expensively as taught by Leih.

With respect to claim 2, the combination of Alford and Leih further teaches, (as taught by Leih), storing cell priority data relating to individual terminal in the stationary network equipment database (see page 4, lines 18-27).

5. Claims 3, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alford** and **Leih et al** as applied to claims 2 and 6 above, and further in view of **Takahashi et al.** (5,854,980).

6. With respect to claims 3 and 7, Alford as modified by Leih fail to specifically disclose that the stationary network equipment is arranged to supply information to the terminal about priority data relating to the terminal, as a response to one of the following: the terminal registers with the cellular radio system, the terminal's location data changes in the cellular radio system, the priority data in the database is altered, a predetermined time has passed since the previous message to the terminal, which contained priority data relating to the terminal. Takahashi discloses a system for

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selecting an access channel for communication in which information relating to a channel is provided during call origination or call reception (see col. 4, lines 30-65). It would therefore have been obvious to one of ordinary skill in the art, at the time of the invention to provide the above teaching of Takahashi with the system of Alford and Leih for the benefit of controlling the provision of desired information needed for communications.

7. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alford and Leih et al** as applied to claims 4 and 6 above and further in view of **Wang et al. (5,649,289)**.

With respect to claims 5 and 8, Alford as modified by Leih teach all limitations as applied to claims 4 and 6 above. The combination of Alford and Leih, however, fail to specifically disclose that the terminal is further arranged to maintain a list of possible cells for re-selection and to arrange the list in an order which is based on a parameter calculated for each cell, in which for priority cells, the terminal is arranged to alter the parameter calculation relating to the cell, so that the parameter has a particular advantageous value in the case of a priority cell. Wang discloses a communication system that uses indexes in determining cells which are considered part of a preferred list for a customer paging area for a mobile subscriber (see col. 5, lines 35-67). It would therefore have been obvious to one of ordinary skill in the art to incorporate the teaching of Wang into the system of Alford and Leih in order to identify the characteristics of preferable cells. Alford and Leih, as modified by Wang, fail to specifically teach the terminal being arranged to maintain a list of possible cells for cell re-selection in an order which is based on a parameter calculated for each cell, in which for priority cells, it is arranged to alter the parameter calculation

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relating to the cell so that the parameter gets a particularly advantageous value in the case of a priority cell. However, it is very well known in the art to use certain defined parameters in maintaining cell re-selection data to favor priority cells as taught by Wang. It would therefore have been obvious to one of ordinary skill in the art to combine the teaching of Wang with the system of Alford and Leih for the benefit of ensuring the selection of priority cells for communication in order to reduce charges for mobile subscribers.

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Alford, Leih et al and Wang et al**, as applied to claim 8 above, and further in view of **ETSI (European Telecommunications Standards Institute), ETS 300 535 (GSM 03.22 version 4.10.0)**.

With respect to claims 9 and 10, Alford and Leih as modified by Wang, (as taught by Wang) further teach priority data relating to a terminal includes at least the priority cell identity (see FIG. 2). However, Alford as modified by Leih and Wang fail to specifically teach information as to whether or not the terminal shall apply an offset parameter, a delay factor relating to the cell and cell re-selection hysteresis in the calculation of the parameter relating to a priority cell in a situation where cell re-selection represents shifting from a non-priority cell to a priority cell. However, it is known in the art to use cell re-selection hysteresis and the use of a delay factor in calculating parameters relating to cell re-selection as taught by GSM 03.22 version 4.10.0. The specification teaches that for cell re-selection in cell prioritization, a hysteresis factor as well as an offset value can be used in determining a parameter (C2) (see sections 3.4- 3.5.2.2)

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It would therefore have been obvious to one of ordinary skill in the art to use a delay factor in the system of Alford , Leih and Wang as taught by ETSI standard for cell re-selection hysteresis in making decisions regarding movement to and from priority cells as desired for the benefit of encouraging or discouraging re-selection of specific prioritized cells.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is (703) 305-4772. The examiner can normally be reached on M-F from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chang, can be reached on (703) 305-6739.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700. The Group fax number is (703) 305-9508.

Serial Number: 09/028,726

*CA*  
Charles Appiah

June 22, 2001.

*Vivian Chang*  
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